**REMARKS**

In accordance with the foregoing, claims 1, 6, 9, and 12 have been amended. Claims 4-5, 7-8, 10-11, and 16-17 are cancelled. Claims 1-3, 6, 9, and 12-15 are pending and under consideration.

CONSIDERATION OF REFERENCES SUBMITTED IN IDS

The outstanding Office Action appears to set forth that consideration of any of the references submitted in the February 2, 2009, IDS has not been given, since some of the cited references were not provided with a full English translation .

However, Applicants respectfully request that consideration at least be given to the Chinese Office Action dated November 28, 2008, as a full English translation of same was submitted in the IDS.

Consideration and indication of same of the Chinese Office Action dated November 28, 2008, and the English translation of same, submitted on February 2, 2009, is requested.

REJECTION UNDER 35 U.S.C. § 101

Claims 1-3 and 6 stand rejected under 35 U.S.C. § 101 as not falling within one of the four statutory categories of invention. This rejection is respectfully traversed.

In view of the present amendments to claims 1 and 6, Applicants respectfully submit that claims 1-3 and 6 satisfy the requirements of 35 U.S.C. § 101.

Withdrawal of this rejection and allowance of all pending claims is respectfully requested.

REJECTION UNDER 35 U.S.C § 102

Claims 6 and 9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Park, U.S. Patent No. 6,438,525. This rejection is respectfully traversed.

By way of review, Park is directed towards a scalable audio encoding/decoding apparatus for coding audio signals into a layered datastream having a base layer and enhancement layers. Park discusses in col. 13, lines 18-20 that the quantized values of the audio signal are decoded sequentially from the MSB's (most significant bits) to the LSB's (least significant bits), and from low frequency components to high frequency components, as in the coding process. Park discusses the coding process in col. 8, lines 2-11, wherein Park discusses that all of the MSBs of all of the frequency components are sequentially processed, and that if

the coding of the MSBs is completed, the next upper significant bit values are obtained to then be sequentially coded.

In contrast, claim 6 at least recites:

> decoding audio data in units of symbols <u>in consideration of a bit range allowed in each of the plurality of layers</u> corresponding to the audio data, in order from a symbol formed with MSB bits down to a symbol formed with LSB bits

Therefore, claim 6 requires that the audio data is decoded in <u>consideration of a bit range allowed in each of the plurality of layers</u> corresponding to the audio data, in order from a symbol <u>formed with MSB bits</u> down to a symbol <u>formed with LSB bits</u>.

However, in col. 13, lines 14-30, cited on page 6 of the Office Action, <u>Park</u> states:

> Among the decoded quantization bits, the maximum value is obtained. The quantized values are decoded sequentially from the MSBs to the; LSBs, and from low frequency components to high frequency components, as in the coding process. If the quantization bit of a certain band is smaller than that being currently decoded, decoding is not performed. When the quantization bit of a certain band becomes equal to that being currently decoded, decoding is performed

Therefore, the decoding discussed in <u>Park</u> is entirely silent regarding "consideration of a bit range allowed in each of the plurality of layers," as claimed. Rather, the decoding in <u>Park</u> is concerned only with frequency bands, and the quantization bit of a certain frequency band.

Further, the Office Action appears to be interpreting the claimed "symbols" as being equal to the bits of <u>Park</u>, in col. 13, lines 14-30 of <u>Park</u>. In response to Applicants' previous remarks, in the Response to Arguments section, the Office Action sets forth that the symbols can be interpreted as individual bits. Further, the Office Action states "As this is not defined as being otherwise in the claims, the broadest reasonable interpretation may be given to the limitations."

However, it is respectfully noted that the broadest reasonable interpretation must also conform to the broadest reasonable interpretation afforded by one of ordinary skill in the art when read in light of the specification. See, *In re Prater*, 162 USPQ 541, 550-51; *In re Morris*, 44 USPQ2d at 1027; M.P.E.P. § 2111.01.

Accordingly, in view of the Specification, and claim 6 which recites "a symbol <u>formed with MSB bits</u>," one of ordinary skill in the art would understand that the claimed "symbol" is not merely an individual bit, but rather, a set of bits, all of the <u>same significance</u>, for example, as

shown in dashed line oval in FIG. 6, and discussed in paras. [0065]-[0066] of the present Application.

Further, Applicants have amended claim 6 to clarify the claimed "decoding" of the audio data. Specifically, claim 6 at least recites "decoding audio data in units of symbols in consideration of a bit range allowed in each of the plurality of layers corresponding to the audio data, in order from a symbol formed with MSB bits down to a symbol formed with LSB bits." Therefore, claim 6 requires that audio data is decoded in consideration of a bit range allowed in each of the plurality of layers.

However, Park discusses in col. 7, line 49-col. 8, line 11, that all of the MSBs (from lowest frequency component to highest frequency component) are processed first, and that the processing is performed sequentially by coupling several bits. In the example given in col. 8 of Parks, the MSB's are coupled in groups of four bits. Therefore, in the groups of four bits processed sequentially in Park, these groups or units do not describe or suggest "in consideration of a bit range allowed in each of the plurality of layers," as claimed. Rather, all of the groups in Park are coupled in groups of four bits of the same bit significance (e.g. MSB bits), without consideration of a bit range allowed in each of the plurality of layers.

Park further discusses in col. 8, lines 7-9, that once the coding of the MSB's is complete then the next upper significant bit values are obtained to then be coded in the order of 0001, 0010, ... up to the LSBs. Therefore, again, Park fails to discuss or suggest "in consideration of a bit range allowed in each of the plurality of layers," as claimed.

Accordingly, Applicants submit that Park fails to describe or suggest the claimed "decoding audio data in units of symbols in consideration of a bit range allowed in each of the plurality of layers corresponding to the audio data, in order from a symbol formed with MSB bits down to a symbol formed with LSB bits." Therefore, Applicants submit that claim 6 patentably distinguishes over the cited art.

Claim 9 at least recites:

> wherein the unpacking unit decodes audio data in units of symbols in consideration of a bit range allowed in each of the plurality of layers corresponding to the audio data, in order from a symbol formed with MSB bits down to a symbol formed with LSB bits, and obtains quantized samples from a bit plane on which decoded symbols are arranged

Therefore, for at least the reasons set forth above regarding claim 6, Applicants submit that claim 9 patentably distinguishes over the cited art.

Withdrawal of this rejection and allowance of all pending claims is respectfully requested.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-3 and 12-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Park in view of Andrew et al. (Andrew), U.S. Patent App. Pub. No. 2002/0131084. This rejection is respectfully traversed.

Andrew is directed towards storing coded image data in storage of fixed memory size whereby during the storage of coded partitions, if it is decided that the buffer is full, a coded least perceptually partition currently stored in the buffer is overwritten by data from a coded more perceptually significant partition. Andrew discusses that the decoder of Andrew, decodes images in substantially raster scan order, commensurate with the usual decoding order of baseline JPEG. See Andrew, para. [0080].

Amended claim 1 at least recites:

> coding the samples in units of symbols in consideration of a bit
> range allowed in each of the plurality of layers corresponding to
> the samples in order from a symbol formed with MSB bits down to
> a symbol formed with LSB bits by obtaining a scalar value
> corresponding to the symbol formed with K-bit binary data, and
> performing Huffman-coding by referring to the K-bit binary data,
> the obtained scalar value, and a scalar value corresponding to a
> symbol higher than a current symbol on the bit plane

The Office Action relies upon Park for the above claimed features, and sets forth an interpretation of Park similar to that set forth under the rejection for claim 6. Specifically, the Office Action sets forth that col. 8, lines 2-11 of Park discusses that units of symbols are represented by the bit sequences.

However, as discussed above regarding claim 6, in col. 8, lines 2-11, Park merely discusses that the MSB of the lowest frequency component and the MSBs of other frequency components are processed sequentially by coupling bits of the same significance. Therefore, in its discussion of coding and decoding, Park fails to describe or suggest "consideration of a bit range allowed in each of the plurality of layers," as claimed.

Therefore, Applicants submit that Park fails to describe or suggest the features of claim 1.

Further claim 1 at least recites:

> by obtaining a scalar value corresponding to the symbol formed
> with K-bit binary data, and performing Huffman-coding by referring

> to the K-bit binary data, the obtained scalar value, and a scalar
> value corresponding to a symbol higher than a current symbol on
> the bit plane

The Office Action states that <u>Park</u> does not discuss these features, and relies upon <u>Andrew</u> in para. [0080] as curing this deficiency. Specifically, the Office Action appears to be interpreting the necessary information of <u>Andrew</u> as being equal to the clamed "scalar value corresponding to a symbol higher than a current symbol on the bit plane." However, here, <u>Andrew</u> discusses that necessary information comes from a higher bit plane (entirely different bit plane). In contrast, claim 1 recites "a scalar value corresponding to a <u>symbol</u> higher than a current symbol <u>on the bit plane</u>," that is, that both the claimed "symbol higher than a current symbol", and the claimed "current symbol" <u>are on the same bit plane</u>.

Therefore, as <u>Andrew</u> discusses obtaining necessary information from entirely different bit planes then a current bit plane, Applicants submit that <u>Andrew</u> fails to cure the deficiencies of <u>Park</u>, and fails to describe or suggest the claimed "obtaining a scalar value corresponding to the symbol formed with K-bit binary data, and performing Huffman-coding by referring to the K-bit binary data, the obtained scalar value, and a scalar value corresponding to a symbol higher than a current symbol on the bit plane."

Thus, in view of the above remarks, Applicants submit that claim 1 patentably distinguishes over <u>Park</u> and <u>Andrew</u>, whether considered alone or in combination. Therefore, Applicants respectfully submit that claim 1, and claims 2-3 which depend therefrom and recite patentably distinct features of their own, patentably distinguish over the cited art.

Claim 12 at least recites:

> wherein the packing unit maps a plurality of K quantized samples
> on a bit plane where K is an integer, codes the samples in units of
> symbols <u>in consideration of</u> a bit range allowed in <u>each of the
> plurality of layers</u> corresponding to the samples in order from a
> symbol formed with MSB bits down to a symbol formed with LSB
> bits by obtaining a scalar value corresponding to the symbol
> formed with K-bit binary data, and performs Huffman-coding by
> referring to the K-bit binary data, the obtained scalar value, and a
> scalar value corresponding to a symbol higher than a current
> symbol on the bit plane

Therefore, for at least the reasons set forth above regarding claim 1, Applicants submit that claim 12, and claims 13-15 which depend therefrom and recite patentably distinct features of their own, patentably distinguish over the cited art.

Withdrawal of this rejection and allowance of all pending claims is respectfully requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: ___7/7/2005___              By: _____

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